

Burley

WHAT IS CLAIMED IS:

- An antisway bar suspension assembly for use on a vehicle chassis comprising:
a first mounting arrangement coupled between a first kingpin and a first airbag;
a second mounting arrangement coupled between a second kingpin and a second
airbag;
- an antisway bar having a first end, a second end, and a central portion;
the first end being secured into the first mounting arrangement; and
the second end being secured into the second mounting arrangement.
2. The antisway bar suspension assembly of claim 1 wherein the first mounting arrangement is secured to the first airbag and the second mounting arrangement is secured to the second airbag.
3. The antisway bar suspension assembly of claim 1 further including a frame mounting bracket, the frame mounting bracket having an opening therethrough along an axial-direction of the frame mounting bracket and the central portion of the antisway bar being rotatably secured through the opening.
4. The antisway bar suspension assembly of claim 1 wherein the first mounting arrangement includes a first housing and the second mounting arrangement includes a second housing.
5. The antisway bar suspension system of claim 1 wherein the central portion of the antisway bar has a diameter of less than 1.5 inches.
6. The antisway bar suspension system of claim 1 wherein the first mounting arrangement is a first lower airbag mounting bracket and the second mounting arrangement is a second lower airbag mounting bracket.

7. The antisway bar suspension system of claim 6 wherein the first lower airbag mounting bracket includes a first bearing and the second lower airbag mounting bracket includes a second bearing.
8. The antisway bar system of claim 7 wherein the first and second bearings are made from ultra-high molecular weight polyethylene.

9. A kit of components for installing a antisway bar in a vehicle, the kit comprising:

an antisway bar having a first end, a second end, and a central portion therebetween;

a first mounting bracket for coupling between a first king pin and a first airbag, the first mounting bracket capable of receiving and securing the first end of the antisway bar; and

a second mounting bracket for coupling between a second king pin and a second airbag, the second mounting bracket capable of receiving and securing the second end of the antisway bar.

10. The kit of claim 9 further including:

a front mounting bracket capable of being secured to a front chassis section of the vehicle, the front mounting bracket further including a bearing with an axial opening, wherein the central portion of the antisway bar is capable of passing through and being secured by the bearing when the kit is assembled into a vehicle chassis.

11. The kit of claim 10 wherein the bearings are made from ultra-high molecular weight polyethylene.

12. The kit of claim 9 wherein the central portion of the antisway bar has a diameter of less than 1.5 inches.

13. The kit of claim 10 wherein the antisway bar is made from 50,000 tensile strength mild steel.

14. A method of installing an antisway bar system on a vehicle suspension assembly comprising:

installing a first mounting arrangement between a first airbag and a first kingpin;

installing a second mounting arrangement between a second airbag and a second kingpin;

securing a first end of an antisway bar into the first mounting arrangement; and

securing a second end of the antisway bar into the second mounting arrangement.

15. The method of claim 14 wherein:

said step of installing the first mounting arrangement on the first axle assembly of the vehicle includes installing a first airbag mounting bracket including a first bearing for receiving and securing the first end of the antisway bar;

said step of installing the second mounting arrangement on the second axle assembly of the vehicle includes installing a second airbag mounting bracket including a second bearing for receiving and securing the second end of the antisway bar;

said step of securing the first end of the antisway bar into the first mounting arrangement includes securing the first end of the antisway bar into the first bearing of the first airbag mounting bracket; and

said step of securing the second end of the antisway bar into the second mounting arrangement includes securing the second end of the antisway bar into the second bearing of the second airbag mounting bracket.

16. The method of claim 14 further including:

securing a front mounting bracket to the vehicle, the front mounting bracket including a third bearing for receiving and rotatably securing a center portion of the antisway bar; and

securing the center portion of the antisway bar into the third bearing of the front mounting bracket.

17. The method of claim 14 further including:
removing a stock configuration antisway bar assembly from the vehicle chassis,
wherein the stock configuration antisway bar assembly includes in its stock
configuration: a left and a right lower A-arm assembly; an antisway bar having a first
end and a second end; and an arrangement for mounting the first end to the right lower
A-arm assembly and an arrangement for mounting the second end to the lower left A-
arm assembly.

18. An vehicle antisway bar suspension assembly comprising:
- a first mounting bracket secured between a first kingpin and a first airbag;
- wherein the first mounting bracket includes a first plate and a second plate, wherein the first plate is fastened to the first king pin and the second plate is fastened to the first airbag
- a second mounting bracket secured between a second kingpin and a second airbag;
- wherein the second mounting bracket includes a third plate and a fourth plate, where in the third plate is secured to the second kingpin and the fourth plate is secured to the second airbag
- an antisway bar having a first end, a second end, and a central portion;
- the first end being rotatably secured into the first mounting bracket; and
- the second end being rotatably secured into the second mounting bracket.
19. The vehicle antisway bar suspension assembly of claim 18, wherein the first mounting bracket further includes a first housing between the first and second plate and the second mounting bracket further includes a second housing between the third and fourth plates.